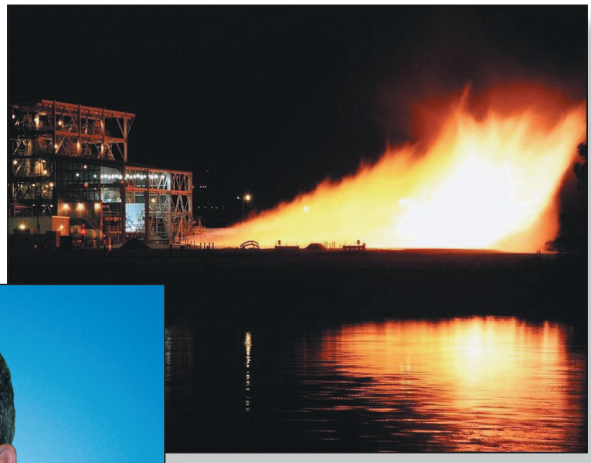
Air Force Research Laboratory|AFRL
Science and Technology for Tomorrow's Air and Space Force

Success Story

MR. THORNBURG RECEIVES NASA LEADERSHIP AWARD



The Propulsion Test Directorate at the National Aeronautics and Space Administration's (NASA) John C. Stennis Space Center honored the Integrated Powerhead Demonstration's (IPD) Air Force program manager, Mr. Jeffrey Thornburg. Mr. Thornburg, a Propulsion Directorate civilian engineer at Edwards Air Force Base (AFB) in California, was honored for his outstanding program leadership at the NASA Center. This is the first time the Stennis Space Center Director's Leadership Award and medallion have been given to a test center customer.

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Accomplishment

Mr. Thornburg was honored for his leadership abilities in the Air Force, NASA, and the industry IPD team at Stennis. The honor also included the successful completion of testing on two key rocket engine components, a new liquid-hydrogen turbopump, and a unique oxidizer preburner, which are considered critical milestones in the development of future engine systems.

The component tests are part of the IPD program, a joint venture between the Integrated High Payoff Rocket Propulsion Technology (IHPRPT) program, managed for the Department of Defense (DoD) by the directorate at Edwards AFB, and NASA's Next Generation Launch Technology program at the Marshall Space Flight Center in Huntsville, Alabama.

Background

The liquid-hydrogen fuel turbopump was developed for the Air Force and NASA by the Boeing Company Rocketdyne Propulsion and Power Division and successfully tested at Stennis test facilities. Aerojet Corporation, the component designer, conducted testing of the oxidized preburner. It is the first flight-capable, oxygen-rich preburner ever developed in the United States for a large-scale rocket engine.

The IPD program is an important part of the DoD's IHPRPT program, which seeks to double the performance and capability of today's state-of-the-art rocket propulsion systems while decreasing costs associated with military and commercial access to space. The collaboration between AFRL, DoD services, NASA, and the aerospace industry has produced demonstrations of IHPRPT goals and decreased the time needed to transition their achievements.

The directorate manages and conducts Air Force basic, exploratory, and advanced research and development of aerospace power and propulsion technologies. Nearly every American rocket-propelled system used today for tactical, ballistic launch, space launch, and spacecraft operations can trace its technology to the men and women of the Edwards Research Site.

Propulsion
Awards and Recognition

Additional Information

To receive more information about this or other activities in the Air Force Research Laboratory, contact TECH CONNECT, AFRL/XPTC, (800) 203-6451 and you will be directed to the appropriate laboratory expert. (04-PR-24)